

JAMES CITY SERVICE AUTHORITY

INDEX

SECTION 1. WATER DISTRIBUTION AND SANITARY SEWER SYSTEMS

1.1	GENERAL	1 - 1
1.2	DESIGN OF FACILITIES	1 - 2
1.3	VERTICAL AND HORIZONTAL SURVEY DATUM CONTROL	1 - 3
1.4	CONTRACTOR LICENSING	1 - 3

SECTION 2. SYSTEM DESIGN

2.1	WATER DISTRIBUTION PRESSURE	2 - 1
2.2	ACCEPTABLE WATER MAIN SIZES	2 - 1
2.3	ACCEPTABLE WATER SERVICE CONNECTION SIZES	2 - 1
2.4	COVER	2 - 1
2.5	EASEMENTS	2 - 1
2.6	DEAD ENDS AND HIGH POINTS	2 - 2
2.7	EXTENSION PROVISIONS	2 - 3
2.8	HYDRAULIC ANALYSIS	2 - 3
2.9	WATER AND SANITARY SEWER SYSTEM DATA SHEETS	2 - 6
2.10	FLOW DEMANDS AND DESIGN CONSIDERATIONS	2 - 16
2.11	FIRE FLOW REQUIREMENTS	2 - 21
2.12	THRUST RESTRAINTS	2 - 21
2.13	CONNECTION TO EXISTING WATER AND SANITARY SEWER SYSTEMS.	2 - 22
2.14	MINIMUM GRADES	2 - 22
2.15	MAXIMUM VELOCITY	2 - 23
2.16	JUNCTIONS	2 - 23
2.17	MANHOLES	2 - 23
2.18	MINIMUM SANITARY SEWER SIZES	2 - 24
2.19	DEPTH OF SANITARY SEWERS	2 - 24
2.20	SURFACE WATER CROSSING	2 - 24
2.21	PIPE CROSSING SEPARATION	2 - 25
2.22	PROXIMITY TO BEST MANAGEMENT PRACTICES (BMP'S)	2 - 25
2.23	PLAN CLARITY	2 - 25
2.24	GREASE TRAPS	2 - 25
2.25	RESIDENTIAL GRINDER PUMPS	2 - 25
2.26	GENERAL SYSTEM DESIGN CONSIDERATIONS	2 - 26
2.27	WATER METER.	2 - 27
2.28	DETECTOR CHECK VALVE	2 - 28
2.29	BACKFLOW PREVENTION DEVICES	2 - 28
2.30	CONTROL VALVES (2-inches in Diameter and Larger)	2 - 28

2.31	PROCEDURES WHEN CUTTING INTO OR REPAIRING WATER MAINS	2 - 29
2.32	CONSTRUCTING WATER AND SANITARY SEWER PIPELINES IN FILL AREAS.....	2 - 29
2.33	SUBSURFACE UTILITY LOCATING	2 - 30
2.34	TEMPORARY CONSTRUCTION METERS.....	2 - 30
2.35	MASTER UTILITY PLAN DEVELOPMENT	2 - 30

SECTION 3. PROJECT CLOSE-OUT

3.1	RECORD DRAWINGS	3 - 1
3.2	WARRANTY (DEVELOPMENT PROJECTS).....	3 - 2
3.3	DEDICATION (DEVELOPMENT PROJECTS)	3 - 2
3.4	WATER METER ALLOWANCE.....	3 - 2

SECTION 4. WATER FACILITIES AND PUMPING STATIONS

4.1	WELLS, STORAGE TANKS AND WATER PRODUCTION FACILITIES ...	4 - 1
4.2	WASTEWATER PUMPING STATIONS.....	4 - 1
4.3	OPERATIONS, MAINTENANCE AND REPAIR MANUALS	4 - 1

SECTION 5. GENERAL NOTES

5.1	JCSA GENERAL NOTES FOR WATER DISTRIBUTION AND SANITARY SEWER SYSTEMS	5 - 1
5.2	JCSA GENERAL NOTES FOR WATER PRODUCTION FACILITIES	5 - 4

APPENDICES:

APPENDIX A JCSA SPECIAL PROVISIONS TO THE HRPDC REGIONAL CONSTRUCTION
STANDARDS (FIFTH EDITION)

APPENDIX B JCSA STANDARD DETAILS

APPENDIX C JCC CODE COMPLIANCE STANDARD DETAILS (For Reference Only)

APPENDIX D JCSA WATER AND SANITARY SEWER SYSTEM DESIGN CHECKLIST

APPENDIX E JCSA WATER AND SANITARY SEWER MASTER PLAN GUIDELINES